

AERB Directive No.01/2013

[Under subsection 1 of section 3 of the Civil Liability for Nuclear Damage Act, 2010 (38 of 2010 and clause (iii) of the sub-rule 1 of Rule 4 of the Civil Liability for Nuclear Damage Rules, 2011 and clause (ii) of item 5 of the Statutory Order S.O. 2911(E)]

Sub: Criteria and Assessment Procedures for Notification of Nuclear Incident under the Civil Liability for Nuclear Damage Act, 2010.

Immediately after receipt of the report on extraordinary nuclear event, AERB shall constitute an Event Review Committee to review and assess the safety significance of the event.

The Event Review Committee (ERC) shall consist of the following members, but not limited to:

- i) Director, Operating Plants Safety Division/Industrial Plants Safety Division/Radiological Safety Division, AERB
- ii) Senior Member from Directorate of Operations, Nuclear Power Corporation of India Limited
- iii) Senior Health Physicists of AERB
- iv) Head, Environmental Studies Section, Health Physics Division, Bhabha Atomic Research Centre
- v) Chairman of Advisory Committee on Occupational Health, AERB & other experts
- vi) Chairman of concerned Unit Safety Committee
- vii) Senior representative from the affected installation

The Committee shall:

- i) Convert all the radioactive releases in terms of I-131 equivalence
- ii) If necessary, carry out a site visit.
- iii) Counter check the information submitted by the utility. The Committee shall also review the report of ESL and RSO containing information on radioactive releases, environmental radiological conditions such as radiation level, contamination level, extent of contamination, radionuclide concentration in different environmental matrices, dose to personnel, injury to personnel etc.

The Committee shall review and assess the extraordinary nuclear event and determine whether the event qualifies for notification under the Act based on the following criteria:

- i) Any single event (including that caused by natural disaster) resulting in stack release corresponding to a quantity of radioactivity radiologically equivalent to a release of 1000 TBq of I-131 or more
- ii) Any single event (including that caused by natural disaster) where in one or more person offsite were, could have been, or might be exposed to radiation or to radioactive material, resulting in a dose or in a projected dose of 100 mSv, or
- iii) Any event (including that caused by natural disaster) leading to injury or death of a person offsite *due to exposure to ionizing radiation emanating from a nuclear installation or during transportation of nuclear material*
- iv) Any event (including that caused by natural disaster) requiring evacuation and having potential economic loss as a part of countermeasure following an off-site emergency at a nuclear installation, or
- v) Any single event (including that caused by natural disaster) leading to a surface contamination of at least a total of any 100 square meters of offsite property due to release of radioactive material from nuclear installation of 10000 Bq/sq.m or more from alpha emitting radionuclides, or leading to radiation level of 100 μ Gy/h (10mR/h) above the natural background at 1 m or more from beta or gamma emitting radionuclides, or
- vi) Any event (including that caused by natural disaster) in the course of transportation leading to release of nuclear material resulting in a surface contamination of off-site property of 10,000 Bq/sq.m or more from alpha emitting radionuclides, or leading to radiation level of 100 μ Gy/h (10mR/h) above the natural background at 1 m or more from beta or gamma emitting radionuclides, or

Notwithstanding the above, if any event not covered by the clauses (i) to (vi) and in the opinion of the Event Review Committee is of sufficient safety significance to cause damage to personnel or property, then the Committee can recommend the event to the Board of AERB for notification.

The review and assessment shall be completed as early as possible but not later than ten days of the occurrence of the event.

Su-moto Action by AERB

On receipt of any information from any source on suspected occurrence of any extraordinary nuclear event, AERB may initiate suo-moto action to determine whether or not there has been any such event and determine whether such an event qualifies for notification under the Act. For this purpose, AERB may take measures to

- (i) visit the affected site
- (ii) obtain necessary information from ESL and RSO of the concerned nuclear installation or other concerned regulatory agencies
- (iii) co-ordinate with the emergency response team of DAE, if necessary
- (iv) review and assess the significance of the event by the Event Review Committee

Review and Approval of the Board of AERB

The report of the Event Review Committee along with its recommendations shall be reviewed and approved by the Board of AERB for notification. The decision of the Board shall be final.

Notification of the Incident

AERB shall notify the nuclear incident within fifteen days of its occurrence.

Notwithstanding the above, notification of a nuclear incident by AERB is intended solely for purposes of administration of AERB's statutory responsibilities under the Civil Liability for Nuclear Damage Act, 2010 and is not intended to indicate a level of discharge or dispersal of radioactivity or exposure to ionizing radiation at which damage to persons or property necessarily will occur, or a level at which damage is likely to occur.

Wide Publicity of the Incident

After the notification of the incident, Secretary, AERB shall cause wide publicity of the incident in the manner given below:

- (i) Press release about the incident to the print and electronic media
- (ii) Uploading the incident on AERB's website
- (iii) Communication of the incident to the local public authorities
- (iv) Communication to the National Disaster Management Authority (NDMA)
- (v) Publication in the Official Gazette of India



(S.S. Bajaj)
Chairman

Atomic Energy Regulatory Board